



Right for Business

DPB24TLX

700+TVL TDN Bullet Camera



Instruction Manual

English Version 1.0

www.digimerge.com
www.flir.com/security

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Thank you for purchasing this product. FLIR/Digimerge is committed to providing our customers with a high quality, reliable security solution.

This manual refers to the following models:

- DPB24TLX

For more information on this product and accessory products, please visit us at:

www.digimerge.com



CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER. NO USER SERVICABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.




WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF THE PLUG TO THE WIDE SLOT AND FULLY INSERT.

Important Safeguards

In addition to the careful attention devoted to quality standards in the manufacturing process of your video product, safety is a major factor in the design of every instrument. However, safety is your responsibility too. This sheet lists important information that will help to assure your enjoyment and proper use of the video product and accessory equipment. Please read them carefully before operating and using your video product.

Installation

1. **Read and Follow Instructions** - All the safety and operating instructions should be read before the video product is operated. Follow all operating instructions.
2. **Retain Instructions** - The safety and operating instructions should be retained for future reference.
3. **Heed Warnings** - Comply with all warnings on the video product and in the operating instructions.
4. **Polarization** - Do not defeat the safety purpose of the polarized or grounding-type plug.

A polarized plug has two blades with one wider than the other.

A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety.
If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
5. **Power Sources** - This video product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your location, consult your video dealer or local power company. For video products intended to operate from battery power, or other sources, refer to the operating instructions.
6. **Overloading** - Do not overload wall outlets of extension cords as this can result in the risk of fire or electric shock. Overloaded AC outlets, extension cords, frayed power cords, damaged or cracked wire insulation, and broken plugs are dangerous. They may result in a shock or fire hazard. Periodically examine the cord, and if its appearance indicates damage or deteriorated insulation, have it replaced by your service technician.
7. **Power Cord Protection** - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the video product.
8. **Ventilation** - Slots and openings in the case are provided for ventilation to ensure reliable operation of the video product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the video equipment on a bed, sofa, rug, or other similar surface. This video product should never be placed near or over a radiator or heat register. This video product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the video product manufacturer's instructions have been followed.
9. **Attachments** - Do not use attachments unless recommended by the video product manufacturer as they may cause a hazard.
10. **Camera Extension Cables** - Check the rating of your extension cable(s) to verify compliance with your local authority regulations prior to installation.
11. **Water and Moisture** - Do not use this video product near water. For example, near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement, near a swimming pool and the like.
Caution: Maintain electrical safety. Powerline operated equipment or accessories connected to this unit should bear the UL listing mark of CSA certification mark on the accessory itself and should not be modified so as to defeat the safety features. This will help avoid any potential hazard from electrical shock or fire. If in doubt, contact qualified service personnel.
12. **Accessories** - Do not place this video equipment on an unstable cart, stand, tripod, or table. The video equipment may fall, causing serious damage to the video product. Use this video product only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the video product. Any mounting of the product should follow the manufacturer's instructions and use a mounting accessory recommended by the manufacturer.


Service

13. **Service** - Do not attempt to service this video equipment yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
14. **Conditions Requiring Service** - Unplug this video product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - When the power supply cord or plug is damaged.
 - If liquid has been spilled or objects have fallen into the video product.
 - If the video product has been exposed to rain or water.
 - If the video product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the video product to its normal operation.
 - If the video product has been dropped or the cabinet has been damaged.
 - When the video product exhibits a distinct change in performance. This indicates a need for service.
15. **Replacement Parts** - When replacement parts are required, have the service technician verify that the replacements used have the same safety characteristics as the original parts. Use of replacements specified by the video product manufacturer can prevent fire, electric shock or other hazards.
16. **Safety Check** - Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks recommended by the manufacturer to determine that the video product is in safe operating condition.
17. **Wall or Ceiling Mounting** - The cameras provided should be mounted to a wall or ceiling only as instructed in this guide, using the provided mounting brackets.
18. **Heat** - The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

Use

19. **Cleaning** - Unplug the video product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
20. **Product and Cart Combination** - Video and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the video product and cart combination to overturn.
21. **Object and Liquid Entry** - Never push objects of any kind into this video product through openings as they may touch dangerous voltage points or "short-out" parts that could result in a fire or electric shock. Never spill liquid of any kind on the video product.
22. **Lightning** - For added protection for this video product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the video product due to lightning and power line surges.

General Precautions

1. All warnings and instructions in this manual should be followed.
2. Remove the plug from the outlet before cleaning. Do not use liquid aerosol detergents. Use a water dampened cloth for cleaning.
3. Keep enough space around the unit for ventilation. Slots and openings in the storage cabinet should not be blocked.
4. During lightning storms, or when the unit is not used for a long time, disconnect the power supply, antenna, and cables to protect the unit from electrical surge.

FCC CLASS A NOTICE

NOTE

This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause harmful interference with radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case you will be required to correct the interference at your own expense.

This equipment has been certified and found to comply with the limits regulated by FCC, EMC, and LVD. Therefore, it is designated to provide reasonable protection against interference and will not cause interference with other appliance usage.

However, it is imperative that the user follows the guidelines in this manual to avoid improper usage which may result in damage to the unit, electrical shock and fire hazard injury.

In order to improve the feature functions and quality of this product, the specifications are subject to change without notice from time to time.



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Features



- 1/3" Sony EX-View™ II 960H with Effio DSP/700+ TVL
- Next Generation Polaris Vision3 for Superior Low Light Viewing
- Smart-IR Night Vision (135ft/41m)
- 2.8-12mm Auto Iris D/N Long-Range Varifocal Lens
- True Day Night with ICR mechanism (TDN)
- IP66 Weatherproof
- Advanced 3D Digital Noise Reduction
- Advanced Shadow Reduction
- Vivid Color Reproduction
- ArcticPro technology for harsh climates (minimum operating temperature -40°F / -40°C)
- Cable through bracket design
- Privacy Masking/Motion Detection
- 12V DC/24V AC Operation
- Service Monitor Output

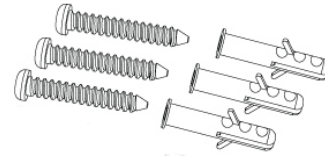
TABLE OF CONTENTS

1. Getting Started	1
2. Camera Installation	2
3. Configuring OSD Menus	5
3.1 Menu Tree Overview	6
3.2 Default Menu Settings	7
3.3 Exposure	9
3.3.1 Auto	9
3.3.2 Manual	10
3.4 Pict Adjust	10
3.4.1 E-Zoom	11
3.5 White Bal	12
3.5.1 ATW (Auto Trace White Balance)	12
3.5.2 Push	12
3.5.3 User1/2	13
3.5.4 Anti-CR	13
3.5.5 Push Lock	13
3.6 WDR	13
3.7 DNR	14
3.8 Day/Night	15
3.8.1 Auto	15
3.8.2 BW Setup	16
3.9 Privacy	17
3.10 Motion Detect	18
3.10.1 Monitor Area	18
3.11 Others	19
3.11.1 Language	19
3.11.2 Lens	19
3.11.3 Sync	20
3.11.4 Cam Title	20
3.11.5 WPC (Advanced Function; Not for Normal Use)	21
3.11.6 Version	21
3.11.7 Camera Reset (Factory Default)	22
3.12 Exit / Save All	22
4. Dimensions	23
5. Technical Specifications	24
6. Troubleshooting	25

1. GETTING STARTED

The system comes with the following components:

- 1 x Camera
- 1 x Mounting Screw Kit
- 1 x Allen Key
- 1 x BNC Test Cable
- 1 x Mounting Template



Mounting Screw Kit:

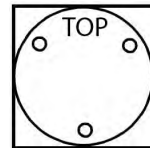
- 3x mounting screws (PA4 30mm)
- 3x drywall anchors



BNC Test Cable



Allen Key



Mounting Template

2. CAMERA INSTALLATION

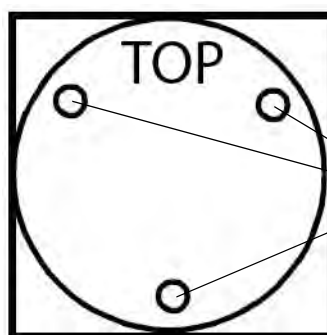


Make sure to follow the correct polarity if connecting the camera to DC power. Polarity is marked on the power connector.

1. Use the included mounting template to mark mounting points for the camera.

NOTE: If mounting the camera on a wall, ensure that the TOP label on the template faces up.

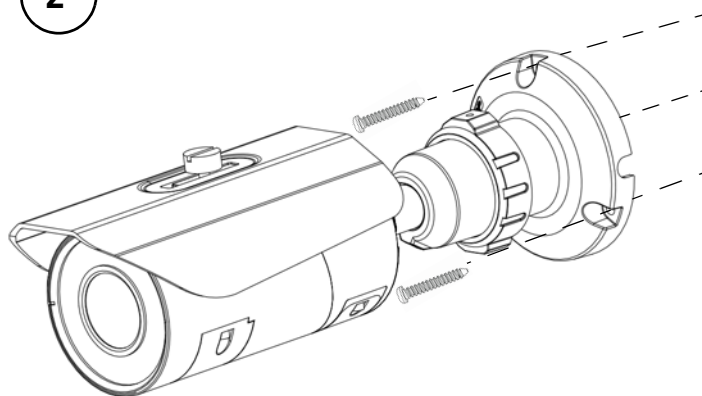
1



Mounting Points

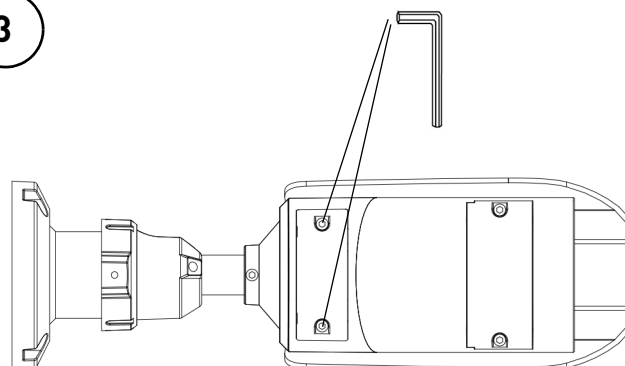
2. Connect the connection cables, and then mount the camera to the surface using the included screws (x3).

2

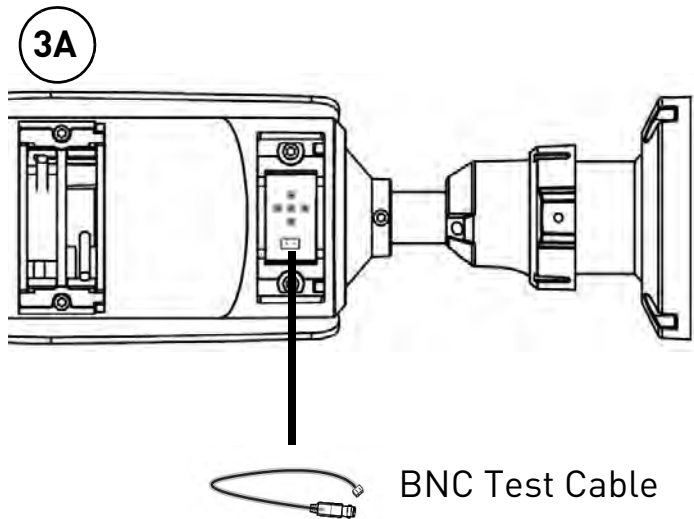


3. (Optional) To use a BNC test cable or adjust the OSD menu, open the service compartment near the camera base by loosening the screws (x2) with the included allen key.

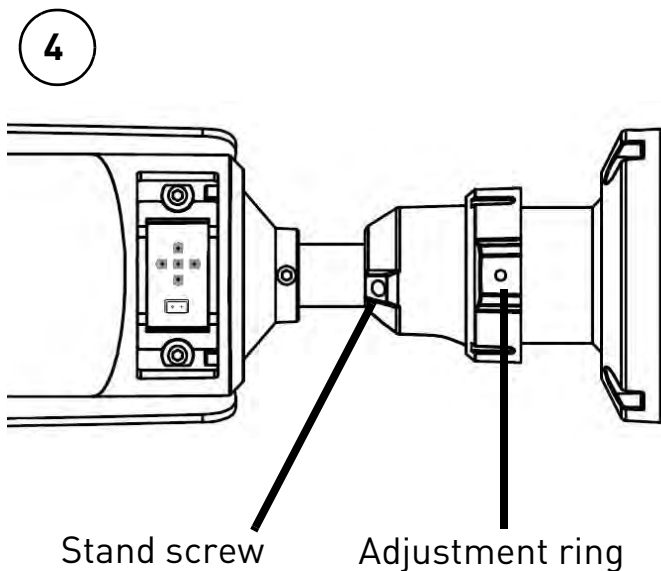
3



- **A.** Insert the included BNC test cable into the video test cable terminals and connect to a test monitor to check the camera viewing angle.
- **B.** For details on adjusting the OSD menu, see “3. Configuring OSD Menus” on page 5.

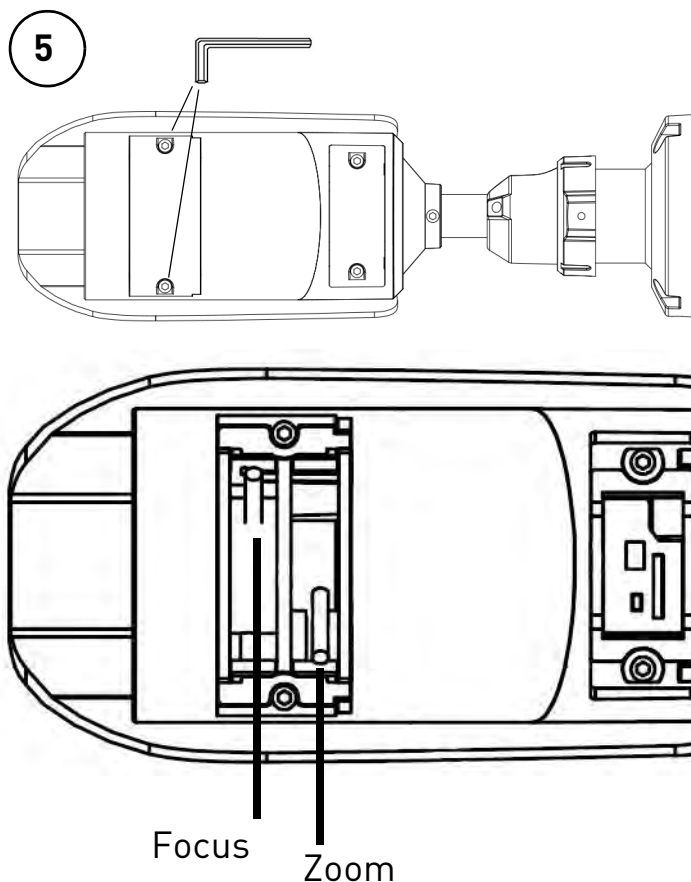


- 4.** To change the camera's viewing angle:
- Loosen the stand screw using the included allen key.
 - Loosen the adjustment ring by hand.
 - Move the camera into the desired position, then tighten the stand screw and adjustment ring.



5. To adjust the camera's zoom and focus:

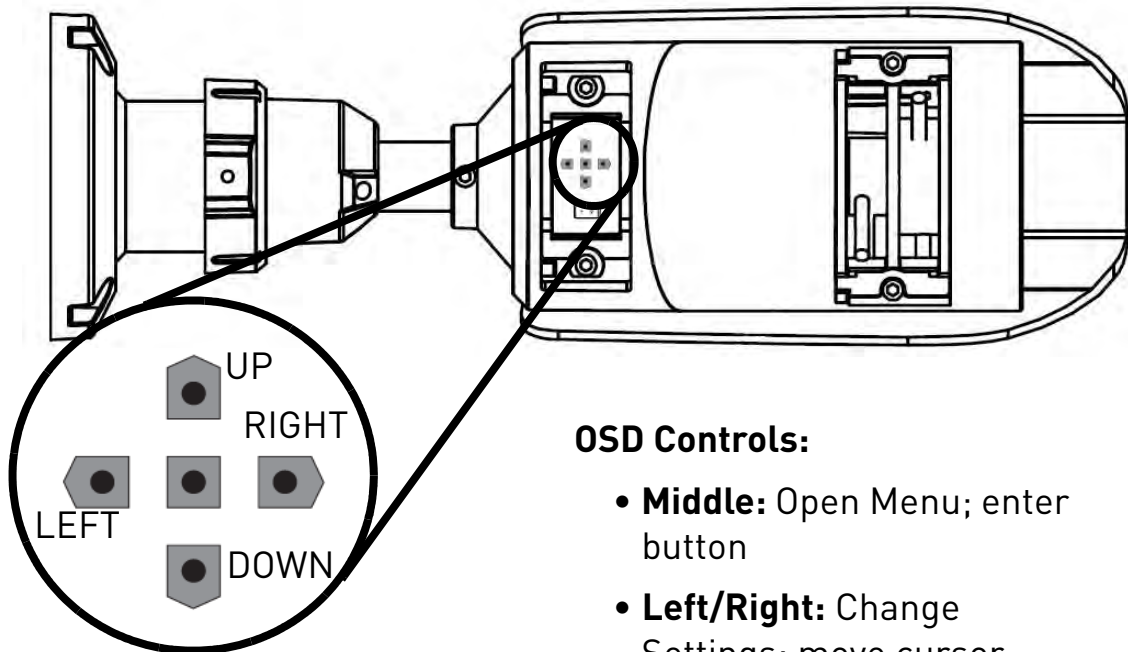
- Open the service compartment near the camera lens by loosening the screws (x2) with the included allen key.
- Twist the zoom and focus knobs counterclockwise to unlock. Move the knobs left or right to adjust the zoom and focus.
- Tighten the knobs when finished.



At the end of installation, ensure both service compartments are firmly closed to ensure the weatherproof rating of the camera.


3. CONFIGURING OSD MENUS

Use the OSD controls, located inside the service compartment, to configure the camera's OSD menus. Press the middle button to open the OSD menu.



OSD Controls:

- **Middle:** Open Menu; enter button
- **Left/Right:** Change Settings; move cursor
- **Up/Down:** Move cursor

If a menu option contains , a submenu is available. Press the middle button to access sub-menus.

SETUP MENU

EXPOSURE	AUTO↵
PICT ADJUST	↵
WHITE BAL	ATW↵
WDR	↵
DNR	↵
DAY/NIGHT	AUTO↵
PRIVACY	↵
MOTION DET	↵
OTHERS	↵
EXIT↵	SAVE ALL

IMPORTANT - When finished updating settings, highlight **Save All** and press the middle button (Enter). If you do not select Save All, settings changes will be lost when the camera reboots.

3.1 Menu Tree Overview

- EXPOSURE • AUTO↵
 - HIGHLUMINANCE • MODE • BRIGHTNESS • LOWLUMINANCE • MODE
 - DSS MAX • AGC MAX
 - MANUAL↵
 - MODE • SHUT • AGC
- PICADJUST • MIRROR • DIS • EZOOM↵ • LEVEL • SHARPNESS • HUE • B-GAIN • R-GAIN • DEFOG
 - ZOOM • PAN • TILT
- WHITE BAL • ATW ↵
 - SPEED • DELAY CNT • ATW FRAME • ENVIRONMENT
 - PUSH • USER1/USER2 ↵ • ANTICR • PUSHLOCK
 - B-GAIN • R-GAIN
- WDR • MODE • LEVEL • HLC • CLIP LEVEL • SCALE • BLC
- DNR • DNR MODE • LEVEL
- DAY/NIGHT • AUTO ↵
 - BURST • DELAY CNT • DAY>NIGHT • NIGHT>DAY
 - BW ↵ • COLOR • EXT
 - SMART IR↵
 - MODE • LEVEL • GAMA OPT
- PRIVACY • AREA SEL • MODE • POSITION↵ • COLOR • TRANSP • MOSAIC
- MOTION DET • MOTION DET • DETECT SENSE • BLOCK DISP • DETECT AREA↵
 - MONITOR AREA↵
- OTHERS • LANGUAGE
 - LENS ↵
 - AUTO↵ • MANUAL
 - TYPE • MODE • SPEED
 - SYNC • CAMERA TITLE • WPC↵ • VERSION↵ • CAMERA RESET
 - INT • LL* ↵

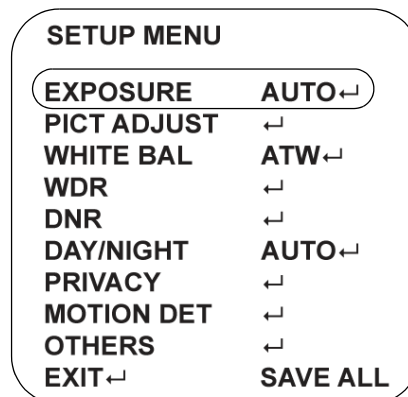
*LL (Line Lock) sub-menu is only shown when the camera is connected to AC power.

3.2 Default Menu Settings

Setting	Default Value
EXPOSURE	AUTO
EXPOSURE→AUTO→HIGH LUMINANCE→MODE	AE+AUTO IRIS
EXPOSURE→AUTO→HIGH LUMINANCE→BRIGHTNESS	32
EXPOSURE→AUTO→LOW LUMINANCE→MODE	AGC→DSS
EXPOSURE→AUTO→LOW LUMINANCE→AGC MAX	98
EXPOSURE→AUTO→LOW LUMINANCE→DSS MAX	x4
PICT ADJUST→MIRROR	OFF
PICT ADJUST→DIS	OFF
PICT ADJUST→EZOOM→ZOOM	0
PICT ADJUST→EZOOM→PAN	512
PICT ADJUST→EZOOM→TILT	256
PICT ADJUST→LEVEL	32
PICT ADJUST→SHARPNESS	9
PICT ADJUST→HUE	50
PICT ADJUST→R-GAIN	177
PICT ADJUST→B-GAIN	177
PICT ADJUST→DEFOG	OFF
WHITE BAL	ATW
WHITE BAL→ATW→SPEED	2
WHITE BAL→ATW→DELAY CNT	2
WHITE BAL→ATW→ATW FRAME	x4
WHITE BAL→ATW→ENVIRONMENT	INDOOR
WDR→MODE	OFF
WDR→LEVEL	-
WDR→HLC	OFF
WDR→CLIP LEVEL	0
WDR→SCALE	10
WDR→BLC	OFF
DNR→DNR MODE	2D+3D
DNR→LEVEL	MIDLOW
DAY/NIGHT	EXT

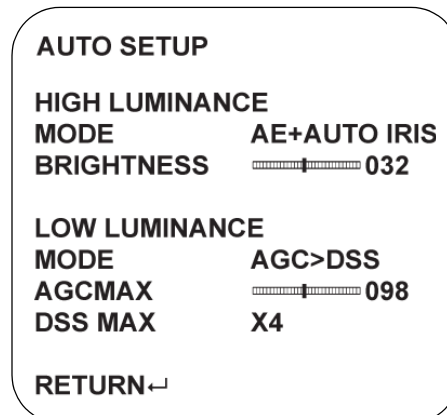
DAY/NIGHT→AUTO→BURST	OFF
DAY/NIGHT→AUTO→DELAY CNT	003
DAY/NIGHT→AUTO→DAY NIGHT	002
DAY/NIGHT→AUTO→NIGHT DAY	005
DAY/NIGHT→BW→SMART IR	ON
DAY/NIGHT→BW→SMART IR→MODE	AUTO
DAY/NIGHT→BW→SMART IR→LEVEL	005
PRIVACY→AREA SEL	1/15
PRIVACY→MODE	OFF
PRIVACY→POSITION	-
PRIVACY→COLOR	-
PRIVACY→TRANSP	-
PRIVACY→MOSAIC	-
MOTION DET→MOTION DET	ON
MOTION DET→DETECT SENSE	111
MOTION DET→BLOCK DISP	OFF
MOTION DET→DETECT AREA	EXIT:HOLD ENTER
MOTION DET→MONITOR AREA→AREA SEL	1/4
MOTION DET→MONITOR AREA→MODE	OFF
MOTION DET→MONITOR AREA→TOP	0
MOTION DET→MONITOR AREA→BOTTOM	0
MOTION DET→MONITOR AREA→LEFT	0
MOTION DET→MONITOR AREA→RIGHT	0
OTHERS→LANGUAGE	ENGLISH
OTHERS→LENS	AUTO
OTHERS→LENS→AUTO→TYPE	DC
OTHERS→LENS→AUTO→MODE	AUTO
OTHERS→LENS→AUTO→SPEED	64
OTHERS→SYNC	INT
OTHERS→CAM TITLE	OFF

3.3 Exposure



Select **AUTO** or **MANUAL** exposure.

3.3.1 Auto



High Luminance

- **Mode:** Select **AE+AUTO IRIS** or **ME+AUTO IRIS**.
- **Brightness:** Brightness level of operating mode set above. Default setting is 32.

Low Luminance

- **Mode:** Select **AGC**, **DSS**, **AGC→DSS**, **AGC→DSS→AGC**, or **OFF**.

NOTE: Settings available only when AUTO is selected in OTHERS→LENS.

- **AGC Max:** Brightness level of operating mode as set above.
- **DSS MAX:** Maximum speed of Digital Slow Shutter feature (1X ~ 512X).

3.3.2 Manual

MANUAL SETUP

MODE	SHUT
SHUT	1/60 (S)
AGC	6 (DB)

RETURN ←

- **Mode:** Select the manual exposure mode: **SHUT** or **DSS**.
- **Shut:** When Mode is set to SHUT, select the shutter speed in x / second: **1/60, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000**. Default setting is 1/60.
When Mode is set to DSS, select the shutter speed: **2, 4, 8, 16, 32, 64, 128, 256**. It is not recommended to set the DSS shutter speed higher than 32.
- **AGC:** Set a fixed gain value for the AGC in db: **6, 12, 18, 24, 30, 36, 42, 44.8**.

3.4 Pict Adjust

SETUP MENU

EXPOSURE	AUTO ←
PICT ADJUST	←
WHITE BAL	ATW ←
WDR	←
DNR	←
DAY/NIGHT	AUTO ←
PRIVACY	←
MOTION DET	←
OTHERS	←
EXIT ←	SAVE ALL

PICT ADJUST

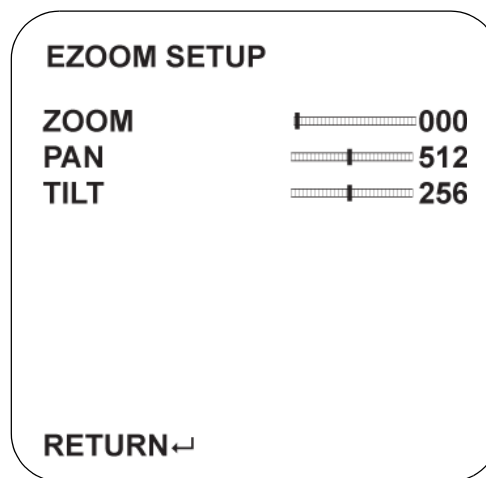
MIRROR	OFF
DIS	OFF
EZOOM	←
LEVEL	<div style="display: flex; align-items: center;"><div style="flex-grow: 1; border-bottom: 1px solid black; position: relative; margin: 0 5px;"><div style="position: absolute; left: 0; top: -2px; width: 10px; height: 2px; background: black;"></div><div style="position: absolute; right: 0; top: -2px; width: 10px; height: 2px; background: black;"></div></div></div> 032
SHARPNESS	<div style="display: flex; align-items: center;"><div style="flex-grow: 1; border-bottom: 1px solid black; position: relative; margin: 0 5px;"><div style="position: absolute; left: 0; top: -2px; width: 10px; height: 2px; background: black;"></div><div style="position: absolute; right: 0; top: -2px; width: 10px; height: 2px; background: black;"></div></div></div> 009
HUE	<div style="display: flex; align-items: center;"><div style="flex-grow: 1; border-bottom: 1px solid black; position: relative; margin: 0 5px;"><div style="position: absolute; left: 0; top: -2px; width: 10px; height: 2px; background: black;"></div><div style="position: absolute; right: 0; top: -2px; width: 10px; height: 2px; background: black;"></div></div></div> 042
R-GAIN	<div style="display: flex; align-items: center;"><div style="flex-grow: 1; border-bottom: 1px solid black; position: relative; margin: 0 5px;"><div style="position: absolute; left: 0; top: -2px; width: 10px; height: 2px; background: black;"></div><div style="position: absolute; right: 0; top: -2px; width: 10px; height: 2px; background: black;"></div></div></div> 104
B-GAIN	<div style="display: flex; align-items: center;"><div style="flex-grow: 1; border-bottom: 1px solid black; position: relative; margin: 0 5px;"><div style="position: absolute; left: 0; top: -2px; width: 10px; height: 2px; background: black;"></div><div style="position: absolute; right: 0; top: -2px; width: 10px; height: 2px; background: black;"></div></div></div> 176
DEFOG	OFF
RETURN ←	

Picture and display control settings.

- **Mirror:** Select **V-FLIP** to vertically flip the image, **H-FLIP** to horizontally flip the image, **HV-FLIP** to both horizontally and vertically flip the image, or **OFF**.
- **DIS:** Select **ON** to enable Digital Image Stabilization or **OFF**.
- **Level:** Select screen brightness from 0~63.

- **Sharpness:** Select screen sharpness from 0~15.
- **Hue:** Adjust the hue value from 0~100.
- **R-Gain:** Adjust red gain from 0~255.
- **B-Gain:** Adjust blue gain from 0~255.
- **Defog:** Select **HIGH**, **MID**, or **LOW** to select the level for Defog function or **OFF** to disable. The Defog function compensates for foggy conditions. It allows the camera to measure each pixel for fog thickness and adjust contrast to offer a uniform image.

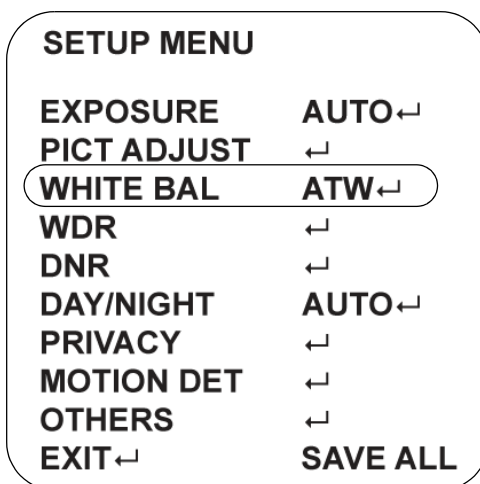
3.4.1 E-Zoom



- **Zoom:** Adjust digital zoom level from 0~255.
- **Pan:** Pan camera image left and right.
- **Tilt:** Tilt camera image up and down.

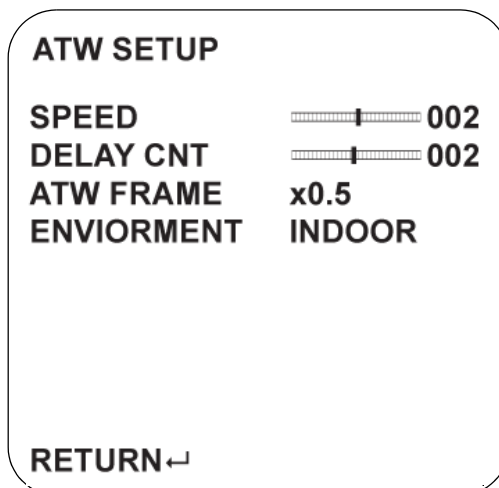
NOTE: Zoom level selected must be greater than 0 to enable digital Pan and Tilt controls.

3.5 White Bal



Select one of the following White Balance modes: **ATW**, **PUSH**, **USER1**, **USER2**, **ANTI CR**, or **PUSH LOCK**.

3.5.1 ATW (Auto Trace White Balance)



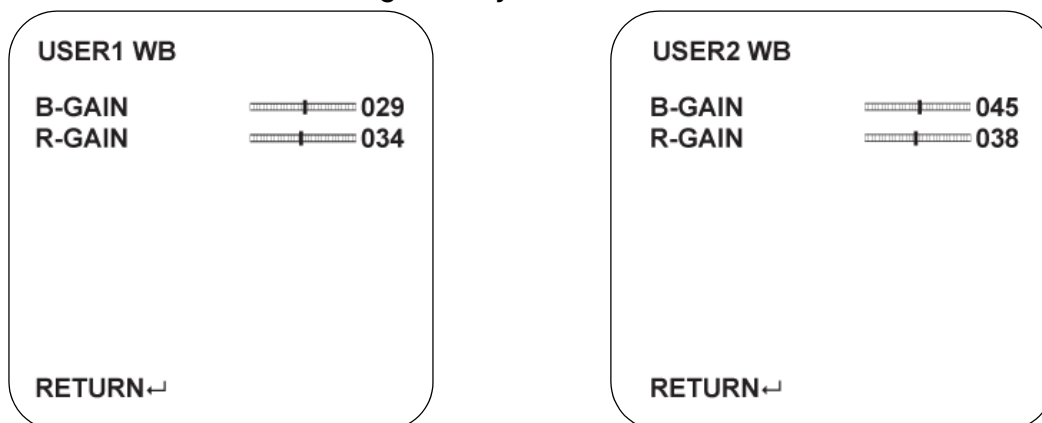
- **Speed:** Specifies the AE control for ATW between 0~255.
- **Delay Cnt:** Sets the delay time for ATW changes between 0~255.
- **ATW Frame:** Sets pull-in frame for magnification. Select **x0.5**, **x1.0**, **x1.5**, or **x2.0**.
- **Environment:** Set the pull-in frame of ATW: **INDOOR** or **OUTDOOR**.

3.5.2 Push

Use white balance regardless of the subject conditions.

3.5.3 User1/2

User defined Blue and Red gain adjustment.



- **B-Gain:** Adjust Blue gain for white balance between 0~255.
- **R-Gain:** Adjust Red gain for white balance between 0~255.

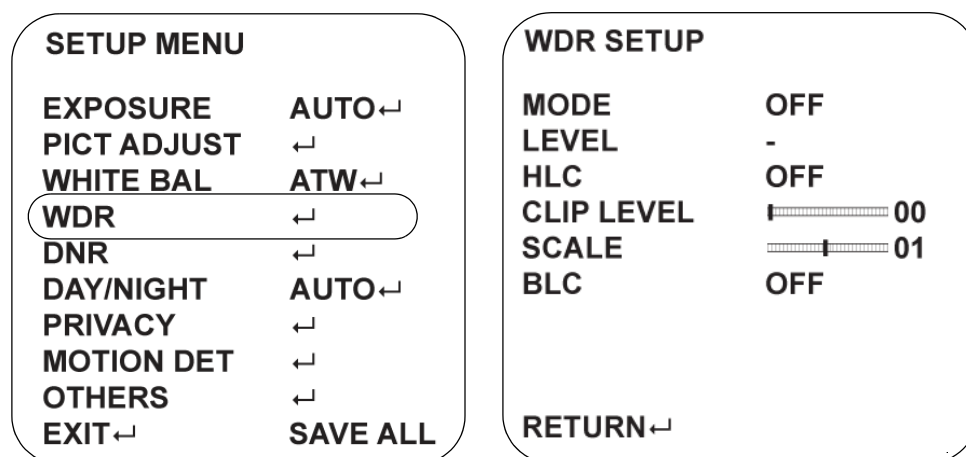
3.5.4 Anti-CR

Activates color rolling suppression.

3.5.5 Push Lock

Press down on joystick to set current scene as the white balance level. Place a 18% gray card in front of the lens and select PUSH LOCK for a natural white level.

3.6 WDR

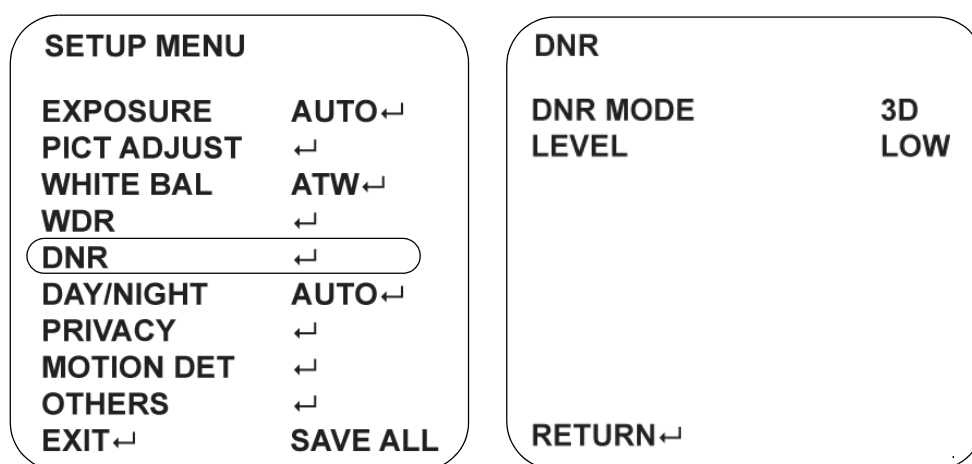


Configure Digital Wide Dynamic Range settings.

- **Mode:** Select **D-WDR** to enable Digital Wide Dynamic Range or **OFF**.

- **Level:** When Mode is set to D-WDR, select the Digital Wide Dynamic Range level: **LOW**, **MIDLOW**, **MID**, **MIDHIGH**, or **HIGH**.
- **HLC:** Select **ON** to enable High Light Compensation, select **OFF** to disable, or select **AUTO** for automatic selection.
- **Clip Level:** Select the clipping level between 0~255.
- **Scale:** Select the scale between 0~15.
- **BLC:** When Mode is set to OFF, select **ON** to enable Backlight Compensation or **OFF**.

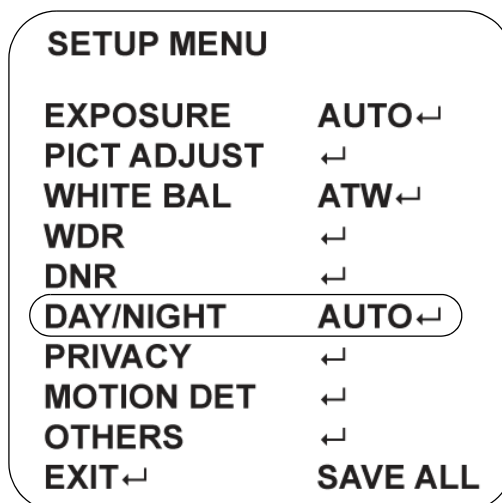
3.7 DNR



Configure Digital Noise Reduction settings. DNR function reduces the background noise in a low luminance environment.

- **DNR Mode:** Select the filter mode for DNR: **2D+3D**, **3D**, **2D**, or **OFF**.
- **Level:** Select the filter strength for DNR: **OFF**, **LOW**, **MIDLOW**, **MID**, **MIDHIGH**, or **HIGH**.

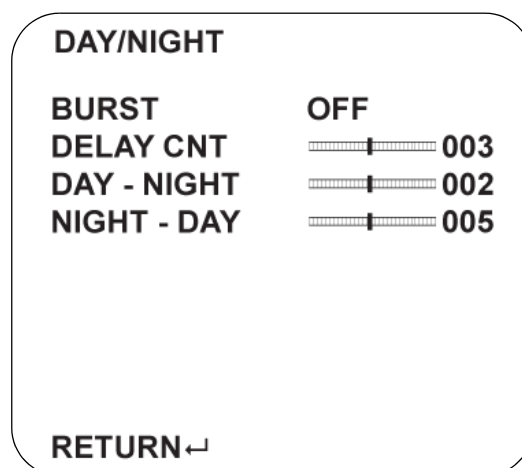
3.8 Day/Night



Day/Night mode can be set to the following options:

- **COLOR:** Color image.
- **BW:** Black and white image.
- **EXT:** CdS light sensor activates Day/Night operation.
- **AUTO:** Camera sensor selects Day/Night mode, based on lighting conditions.

3.8.1 Auto

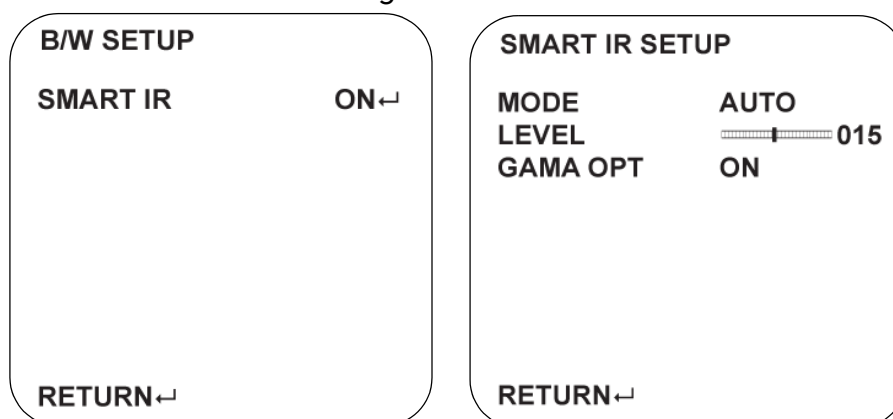


- **Burst:** Select **ON** to enable the burst signal when Night mode has been identified or **OFF**.
- **Delay Control:** Select Day/Night delay time between 0~255.

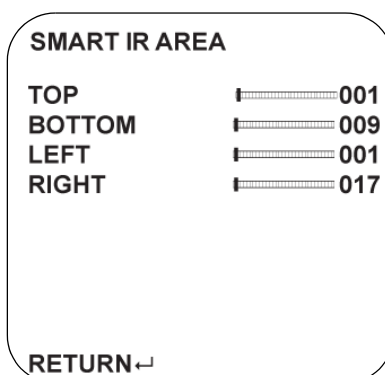
- **Day-Night:** Select threshold for Night status from Day status between 0~255.
- **Night-Day:** Select threshold for Day status from Night status between 0~255.

3.8.2 BW Setup

Allows additional Smart IR settings to be enabled.

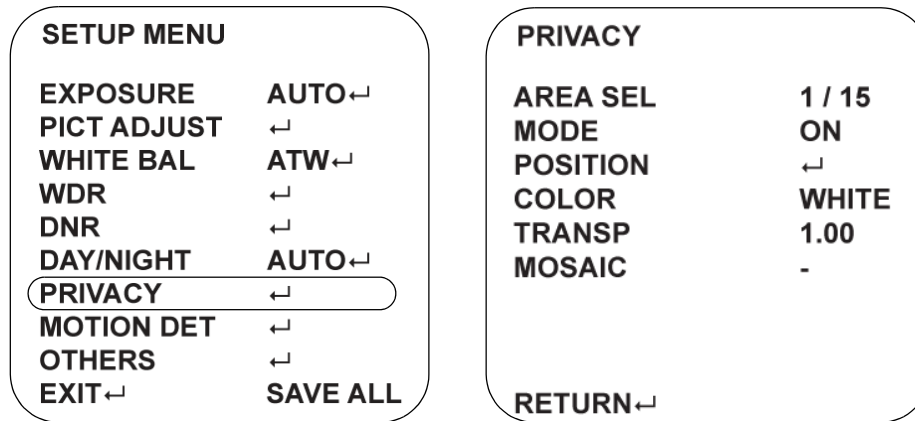


- **Smart IR:** Select **ON** to enable Smart IR; press the middle button to configure Smart IR settings. Select **OFF** to disable Smart IR.
- **Mode:** Select **AUTO** or select **CENTER** and press the middle button to define a rectangular area for Front Light Compensation by adjusting **TOP**, **BOTTOM**, **LEFT**, and **RIGHT**.



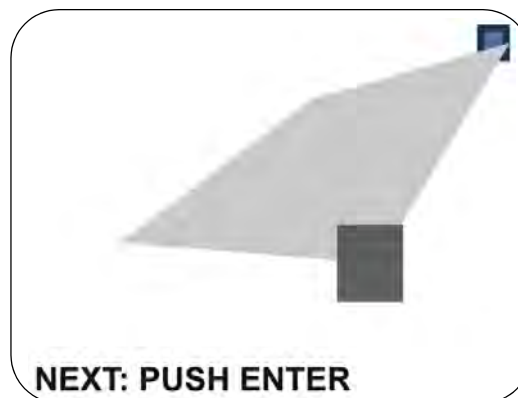
- **Level:** Select the Level for Smart IR from 0~31.
- **Gama Opt:** Select **ON** to optimize Gamma settings or **OFF**.

3.9 Privacy



Configure up to 15 privacy areas that will not be displayed on the monitor.


- **Area Sel:** Select the area you would like to configure.
- **Mode:** Select **ON** to enable the selected privacy area or **OFF**. When a privacy area is enabled, you may configure the settings below.
- **Position:** Press the middle button to configure the position of the selected privacy area.



Press the directional buttons to move the corners (you can create any 4-sided shape). The selected side is highlighted by a small box. To select the next corner, press the middle button. To return to privacy menu, press the middle button repeatedly.

- **Color:** Choose the color for the selected privacy area: **BLACK, RED, GREEN, BLUE, YELLOW, CYAN, MAGENTA,** or **WHITE**.
- **Transp:** Choose the transparency for the selected privacy area: **1.00, 0.75, 0.50,** or **0.00**.
- **Mosaic:** Select **ON** to enable Mosaic mode for the selected privacy area or **OFF**. Mosaic is not available if the Transp setting is 1.00.

3.10 Motion Detect





SETUP MENU		MOTION DET	
EXPOSURE	AUTO↵	MOTION DET	OFF
PICT ADJUST	↵	DETECT SENSE	 111
WHITE BAL	ATW↵	BLOCK DISP	OFF
WDR	↵	MONITOR AREA	↵
DNR	↵		
DAY/NIGHT	AUTO↵		
PRIVACY	↵		
MOTION DET	↵		
OTHERS	↵		
EXIT↵	SAVE ALL	RETURN↵	

Configure Motion Detection settings for the camera. The motion detection areas of the screen are broken into 24 x 16 rectangular blocks. Use MONITOR AREA to configure always-on motion alert areas on the screen.

TIP: Motion detection settings are usually set independently on the DVR, which allows for more advanced customization options.

- **Motion Det:** Select **ON** to enable motion detection or **OFF** to disable.
- **Detect Sense:** Select the motion detection sensitivity level between 0~127.
- **Block Disp:** Select **ON** to display blocks in areas where motion is detected or **OFF**.

3.10.1 Monitor Area

MONITOR AREA	
AREA SEL	1 / 4
MODE	OFF
TOP	 000
BOTTOM	 000
LEFT	 000
RIGHT	 000
RETURN↵	

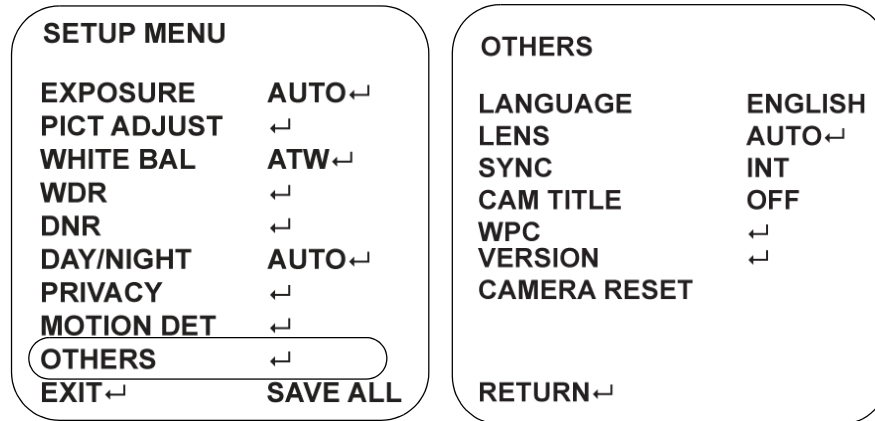
Allows you to configure up to 4 motion detection areas. Areas will be highlighted on the screen and flash when motion is detected within them.

When enabled, Monitor Area colors are: 1: Red. 2: Green. 3: Blue. 4: Yellow.

- **Area Sel:** Select the monitor area to adjust.

- **Mode:** Select **ON** to enable the selected monitor area or **OFF**.
- **Top:** Select the top position of the area.
- **Bottom:** Select the bottom position of the area.
- **Left:** Select the left position of the area.
- **Right:** Select the right position of the area.

3.11 Others



Miscellaneous camera functions.

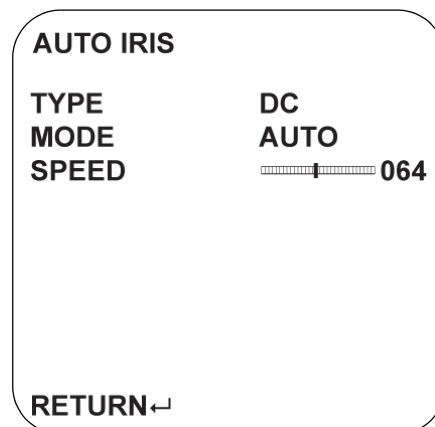
3.11.1 Language

Select OSD language.

3.11.2 Lens

Select **AUTO** or **MANUAL**. If you select AUTO, press the middle button to configure the following options:

NOTE: It is recommended to use the AUTO setting to ensure the best possible performance.



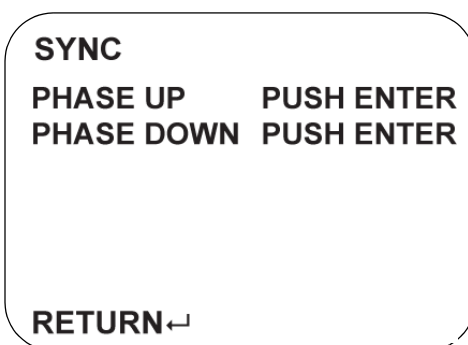
- **Mode:** Select the iris control mode: **AUTO**, **OPEN**, or **CLOSE**.
- **Speed:** Select the iris convergence speed between 0~255.

3.11.3 Sync

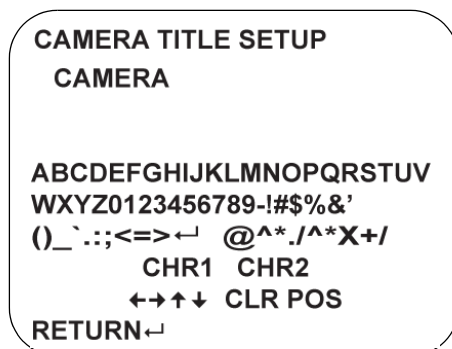
Camera uses internal sync (INT) when camera is connected to DC power.
Line Lock (LL) is used when camera is connected to AC power.

If you notice color rolling when the camera is connected to AC power:

1. Select **LL** and press the middle button.
2. Select **PHASE UP** or **PHASE DOWN** and press the middle button to adjust the phase.



3.11.4 Cam Title



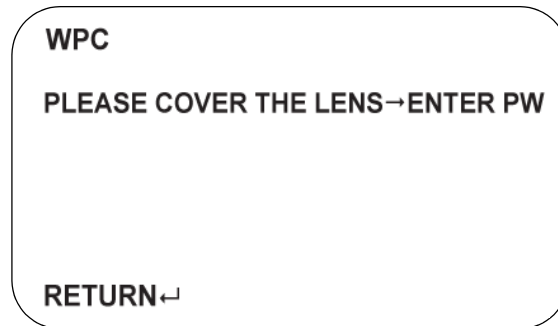
Select a camera title to be shown on the screen.

To create a camera title:

1. Under **Cam Title**, select **ON** and press the middle button.
2. Press the up/down/left/right buttons to move around and press the middle button to enter characters.
 - Use the arrows to move the cursor.
 - Use **CLR** to delete the currently selected character.

- Use **POS** to change the title position.
3. When finished, select **RETURN** and press the middle button to save the camera title.

3.11.5 WPC (Advanced Function; Not for Normal Use)



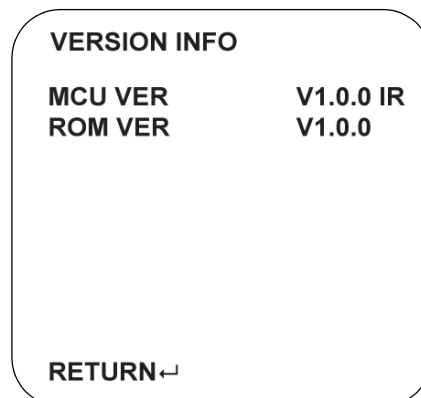
The WPC (White Pixel Compensation) features is used to correct the CCD if dead pixels are visible.

To use White Pixel Compensation:

NOTE: For WPC to work, you must cover the lens completely so no light can enter the camera sensor.

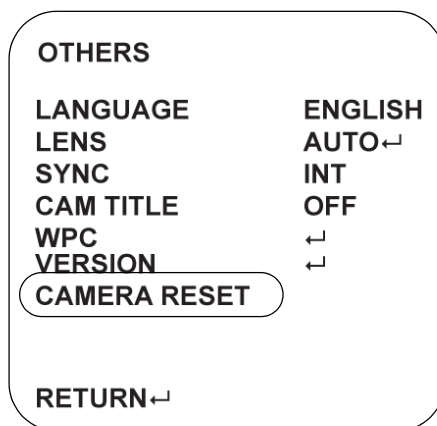
1. Select **WPC** and press the middle button.
2. Press the up, down, left, right, middle button to start the compensation process.
3. When prompted, press the middle button to exit.

3.11.6 Version



Select **VERSION** and press the middle button to view information regarding the current camera software.

3.11.7 Camera Reset (Factory Default)



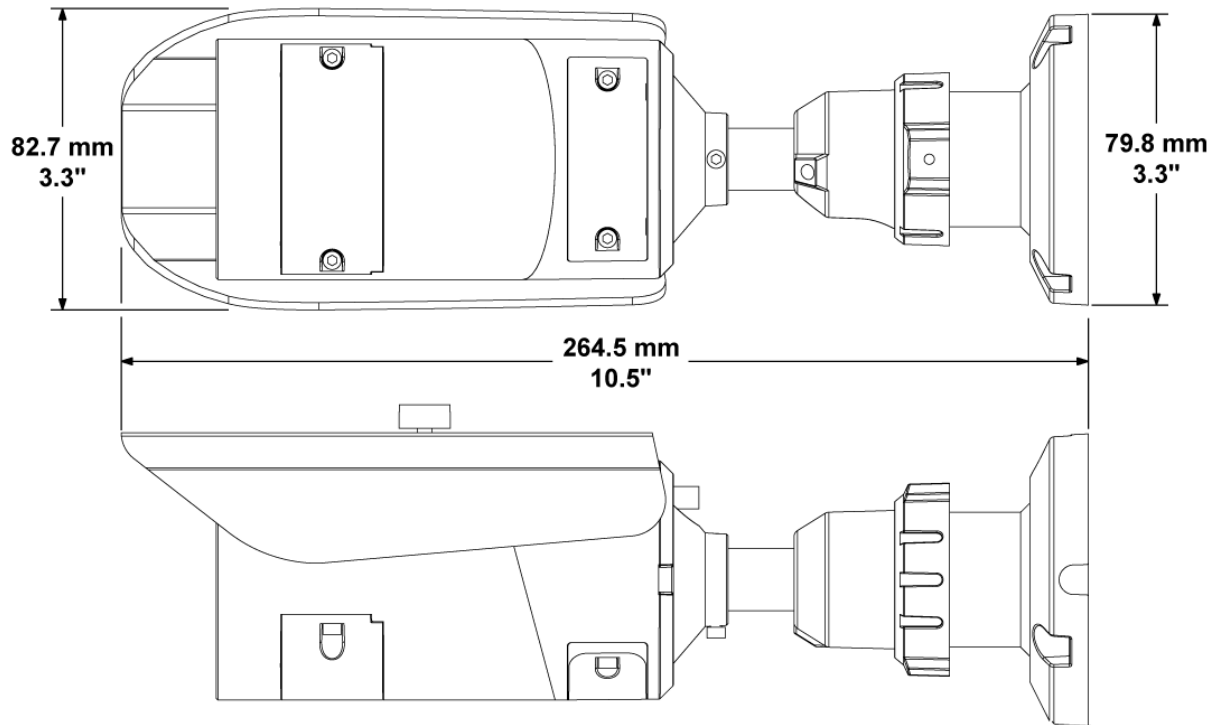
Select **CAMERA RESET** and press the middle button to reset the camera to factory default settings.

3.12 Exit / Save All



- **Exit:** Select **EXIT** and press the middle button to exit the OSD menu. This will keep any changes only until camera is powered off.
- **Save All:** Select **SAVE ALL** and press the middle button to save current settings to camera. Settings are retained after the camera loses power.

4. DIMENSIONS



5. TECHNICAL SPECIFICATIONS

Description	Specification
Power Source	DC 12V / AC 24V +10%
Power Consumption	7.2W
Minimum Power Requirement	600mA
Image Sensor	Sony EXview™ HAD II 960H
Total Pixels	976 (H) x 494 (V)
Scanning System	2:1 Interlace
Sync. System	Internal
Resolution	700+ TVL
Minimum Illumination	0.01 Lux @ F1.2 0.00002 Lux with Slow Shutter (512x) 0.0 Lux with IR LED
Video Output	BNC Connector
S/N Ratio	More than 52db
Power Input	2-pin terminal block (detachable)
Video Output	1.0 Vp-p (75 ohm, composite)
Lens	2.8–12mm F1.4 Varifocal DC Auto Iris
Operating Humidity	Within 85%RH
Operating Temperature	–40~122°F / –40~50°C
IP Rating	IP66
Weight	0.8kg/1.7lbs

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6. TROUBLESHOOTING

Follow the steps below if you are experiencing trouble with your camera. Contact Digimerge Technical Support if the issue persists.

Nothing appears on the screen:

- Check that the power cable is connected properly and that the voltage is correct.
- Check that you have properly connected VIDEO cable to the camera VIDEO output jack and to the monitor/DVR.

The image on the screen is unclear:

- Is the lens stained with dirt? Clean the lens with a soft, clean cloth.
- Re-position the camera if necessary.
- Adjust the Zoom and Focus screws as needed.

The image on the screen is dark:

- If you have an intermediate device, set the impedance to 75Ω / Hi-z.
- Adjust the monitor contrast & brightness controls.

Image quality is poor:

- Return the camera OSD to factory default settings (Middle button→OTHERS→CAMERA RESET).
- Verify that the camera is receiving sufficient power.

There is interference in the image.

- The camera or the cables may be close to a source of high voltage, such as a generator. Re-position the camera if necessary.

Need Help?

Please make sure to visit our website **www.digimerge.com** to receive product updates and information.

3 Easy Ways To Contact Us



Online:

Product support is available 24/7 including product information, user manuals, quick start up guides and FAQ's at **www.digimerge.com**



By Email:

Technical support (for technical/installation issues)
tech@digimerge.com



By Phone:

North America: 1-866-816-5919

Technical support (for technical/installation issues)
Mon-Fri 8.00 am to 8.00pm EST

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